| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/471,689 | 12/23/1999 | SELMER CONRAD BRINGSJORD | YO999-507 | 7822 |

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| EXAMINER |
|---|
| BOOKER, KELVIN E |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2121 | 17 |

DATE MAILED: 02/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | | Applicant(s) |
|---|---|---|---|
| **Office Action Summary** | 09/471,689 | | BRINGSJORD ET AL. |
| | Examiner | | Art Unit |
| | Kelvin E Booker | | 2121 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *15 December 2003*.

2a)☐ This action is **FINAL**.  2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-32* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *26-28 and 31* is/are allowed.

6)☒ Claim(s) *1,10-25,29,30 and 32* is/are rejected.

7)☒ Claim(s) *2-9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All  b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *16*.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☒ Other: *Detailed Office Action*.

## DETAILED ACTION

### *Response to Amendment*

1. In Amendment "C", filed May 15, 2003 (see paper no. 13), **claims 1, 15, 29, 30 and 32** have

been amended. Since the aforementioned amendment, the applicant has responded to the request

for further information (e.g., 37 CFR 1.105, see paper no. 15), and submitted an IDS (see paper

no. 16) reflecting pertinent art by the author.

2. **Claims 1-32** have been presented for further consideration.

### *Allowable Subject Matter*

3. The indicated allowability of **claims 1-25, and 30** is withdrawn in view of the newly

discovered reference to Bringsjord, "Chess Is Too Easy". Rejections based on the newly cited

reference(s) follow.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
> sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1, 10-25, 29, 30, 32** are rejected under 35 U.S.C. 102(b) as being anticipated by

Bringsjord, S., "Chess Is Too Easy" [hereafter Bringsjord].

**As per claim 1**, Bringsjord teaches of a computer-implemented method of automatically

generating a story, comprising:

A. selecting a theme of said story (see page 24, Brutus 1's System Architecture Diagram:

selecting from a host of themes to support thematic concept instantiation);

B. examining elements of said theme and instantiating said theme (see page 24, Brutus

1's System Architecture Diagram: supporting thematic concept instantiation); and

C. using said theme to select and control other aspects of the story generation, including

plot of said story that employs knowledge-generated characteristics, relationships, and events

(see page 28, column 1, paragraphs 1-4; and page 24, Brutus 1's System Architecture Diagram:

processing the interaction of thematic instantiation, plot development and language generation in

generating a story).

**As per claim 10**, Bringsjord teaches of a method further comprising, generating a story

based on an input from a language generator (see page 24, Brutus 1's System Architecture

Diagram: integrating the Language Generation process).

**As per claim 11**, Bringsjord teaches of a method wherein a user selectively constrains

said process at any of a plurality of predetermined steps of said process, such that said user may

select a theme from a database of themes and a plot from a plot database, such that user can

anchor the story to said choices made by the user (see page 28, columns 1-4: user/human

interaction with storytelling within the gaming area).

**As per claim 12**, Bringsjord teaches of a method wherein said theme is selected from a

plurality of themes stored in a database (see page 24, Brutus 1's System Architecture Diagram:

themes used to support the Thematic Concept Instantiation process).

As per claim 13, Bringsjord teaches of a method wherein said theme is captured such that said theme influences other processes but are independent of said processes of the story generation (see page 24, Brutus 1's System Architecture Diagram).

As per claim 14, Bringsjord teaches of a method wherein said theme is captured and stored in a database in advance by forming a formal expression in a formal language using primitive elements provided in a thematic knowledge base (see page 24, Brutus 1's System Architecture Diagram: Knowledge Level used to support Themes).

As per claim 15, Bringsjord teaches of a method further comprising, identifying various classes of knowledge, a set of computational entities and their interactions for building creative agents for producing random, interesting artifacts in a particular language (see page 28, column 1, paragraph 2; and page 26, Mathematization of Betrayal Diagram).

As per claim 16, Bringsjord teaches of a method further comprising, identifying various system components, their roles and interactions in architecture for computational creativity (see page 24, Brutus 1's System Architecture Diagram).

As per claim 17, Bringsjord teaches of a method further comprising, identifying a notion of thematic knowledge and its role in architecture for computational creativity (see page 24, Brutus 1's System Architecture Diagram: Knowledge based themes).

As per claim 18, Bringsjord teaches of a method further comprising identifying a process of thematic instantiation and its role in architecture for computational creativity (see page 24, Brutus 1's System Architecture Diagram: Thematic Instantiation process).

As per claim 19, Bringsjord teaches of a method further comprising: identifying the role of class of knowledge in computational creativity called impressionistic knowledge (see page 28, column 1, paragraphs 2-4).

As per claim 20, Bringsjord teaches of a method further comprising, identifying man-machine interfaces points for controlling a creative process executed by said system (see page 28, column 1, paragraph 1: using human interfacing with the gaming industry for controlling the creative process).

As per claim 21, Bringsjord teaches of a method wherein said story generation is theme-based such that said theme is selected first to constrain choices made in generating said story and to ensure that said story is about said theme (see page 28, column 1, paragraphs 3 and 4; and page 24, Brutus 1's System Architecture Diagram: Thematic Instantiation process).

As per claim 22, Bringsjord teaches of a method further comprising, using literary devices in generating said story so as to influence a literary style of said story (see page 24, Brutus 1's System Architecture Diagram: Literary Associations, Lexicon and Generative Formal Grammar processing used as support for the Language Generation process).

As per claim 23, Bringsjord teaches of a method wherein said literary devices include a choice of words and phrase used in conveying events of said story to convey a psychological consciousness of a character of said story (see page 24, Brutus 1's System Architecture Diagram: Literary Associations, Lexiconic and Generative Formal Grammar processing used as support for the Language Generation process).

**As per claim 24,** Bringsjord teaches of a method wherein said literary devices are keyed

to said theme (see page 28, column 1, paragraphs 3 and 4; and page 24, Brutus 1's System

Architecture Diagram).

**As per claim 25,** Bringsjord teaches of a method further comprising, providing a user

interface points at predetermined positions of a sequence of said story generation, such that said

user selectively provides an input to constrain an aspect of said story generation (see page 28,

column 1, paragraph 1).

**As per claims 29, 30 and 32,** the same limitations are subjected to in **claim one,**

therefore the same rejections apply (see **claim one** above).

### *Allowable Subject Matter*

6. **Claims 26-28 and 31** are allowed.


7. **Claims 2-9** are objected to as being dependent upon a rejected base claim, but would be

allowable if rewritten in independent form including all of the limitations of the base claim and

any intervening claims.


8. The following is a statement of reasons for the indication of allowable subject matter:

the cited prior art fails to explicitly teach of a computer-implemented method for

automatically generating a story containing the limitation of claim one, wherein a simulation

engine is employed to play out a series of events over time, generating a plot which includes

characters, their characteristics, their respective interactions, and a history of events and their

temporal relationships, wherein the simulation engine has a predetermined randomness such that

random elements from the databases are selected.


## *Conclusion*

9. The following prior art made of record and not relied upon is considered pertinent to

applicant's disclosure:

Bringsjord, "Why Did Evolution Engine Consciousness?".


10. An inquiry concerning this communication or earlier communications from the examiner

should be directed to Kelvin Booker whose telephone number is (703) 308-4088. The examiner

can normally be reached on Monday-Friday from 7:00 AM-5:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Anil Khatri, can be reached on (703) 305-0282. The fax number for the organization

where this application or proceeding is assigned is (703) 872-9306.

An inquiry of a general nature or relating to the status of this application proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.


**K.E.B.**

**Art Unit 2121**

**February 20, 2004**

Wilbert L. Starks, Jr.
Primary Examiner
Art Unit - 2121